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DD/A Registry

89-1328X

AGENCY OCCUPATIONAL SAFETY & HEALTH COMMITTEE (AOSHC)
 Minutes of the Meeting
 13 June 1989

1. The meeting commenced in the OMS Conference Room at 2:05 p.m. In attendance were:

25X1 [redacted] Acting Chairman
 [redacted] Office of the DDA
 [redacted] Admin Officer/DCI
 [redacted] Logistics/DCI
 [redacted] Chief, Safety Division/OMS/DDA
 [redacted] CMS/DO
 [redacted] AS/ICS/DCI
 [redacted] PBO/ICS/DCI
 [redacted] Logistics/OP/DDA
 [redacted] CSD/OC/DDA
 [redacted] Safety/OC/DDA
 [redacted] MPSS/DI
 [redacted] DISD/OS/DDA

2. The minutes of the 9 May 1989 AOSHC meeting were distributed to members present for their review and comment. 25X1 [redacted] asked if any members had corrections to make to the minutes and no one did.

25X1 3. [redacted] introduced [redacted] Chief, Environmental and Occupational Health Branch, Safety Division/OMS, who provided the committee with a briefing on the OSIA radiation safety program managed by OMS.

4. Following the OSIA briefing, a brief discussion took place relative to the ventilation systems in the Original and New Headquarters Buildings.

5. The next AOSHC meeting will be held Tuesday, 18 July 1989 at 2:00 p.m. in the OMS Conference Room, instead of Tuesday, 11 July, the second Tuesday of the month, as the Conference Room was previously booked.

DD/A REGISTRY

FILE LOGS-12-AR

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OSIA RADIATION SAFETY BRIEFING

13 June 1989

I. Introduction

II. Potential Radiation Hazards

- A. At Missile Sites
- B. At Reseach Sites (xray, nuclear reactors) fallout fm Chernobyl
- C. Chernobyl

III. Monitoring Radiation Exposure

A. External Radiation Dosimetry

TLD Badges
Pen Dosimeters
Pocket Dosimeters

B. Safety Standards

OSHA, NRC
Results of Baseline Monitoring

C. Internal Radiation Exposure

Contamination Monitoring

IV. Future Plans

Tech/Ops Landauer, Inc.

2 Science Road
Glenwood, Illinois 60425-1586
Telephone (312) 755-7000
TELEX 881292

Landauer®

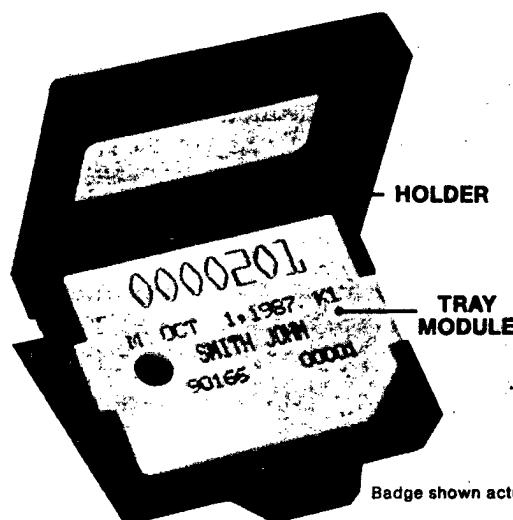
TLD BODY BADGE (THERMOLUMINESCENT DOSIMETRY)

STANDARD SERVICE (TYPE K1 – X-RAY, BETA, GAMMA RADIATION)

Your initial shipment consists of holders with trays, encapsulating three TLD elements, already in place. **You will retain the holder.** Only the tray module will be returned to

Landauer for processing. The module is designed as a single integrated unit, so please do not attempt to disassemble when module is removed from holder.

LOADING AND UNLOADING



Badge shown actual size

Loading and unloading the holder is easy. Open the holder by separating the two opposing tabs at the bottom of the badge. To unload, simply grasp the holder and pull up on one of the tray's side tabs. To load, you will note that the shape of our tray permits insertion in only one direction. Just snap the tray module in and close the holder. The filters and TLD's will always be properly aligned.

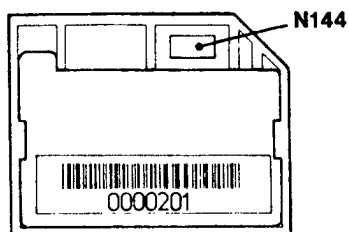
Please note: Unlike film, the TLD element is reusable and is charged to your inventory account at each shipment. Therefore, be sure to return all badge trays, whether used or not, in order to receive credit for TLD elements.

TLD LABEL FORMAT

Each badge tray shipped to you is laser engraved to uniquely identify the user and wear period:

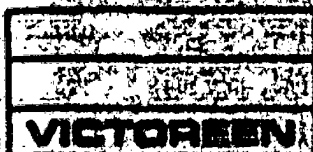
- Binary Reference Number (hidden when badge is closed; also appears as bar code number on back.) ————— 0000201
- Frequency Code, Wear Date, Badge Type ————— M OCT 1, 1987 K1
- Participant Name ————— SMITH JOHN
- Account Number, Series Code, Participant Number ————— 90166 00001

COMBINED NEUTRON, X-RAY, BETA, GAMMA SERVICE (TYPE Z1)



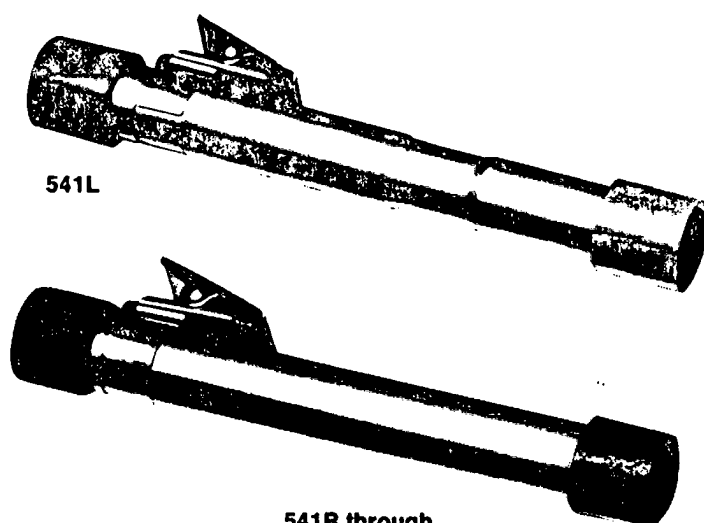
Tray Module (Rear View)

If ordering a NEUTRAK® 144 Fast Neutron Dosimeter with the TLD system described above, the N144 element comes to you already placed in the special receptacle built into the tray. The N144 is returned for processing the same way as for standard TLD service, i.e., by simply removing the entire tray from the holder and sending to Landauer.



VICTOREEN, INC.
(216) 248-0300
FAX (216) 248-0301

Direct-Reading Dosimeters



- "Bright-View" Optics
- Superior Energy Response
- Rugged — Meets ANSI N13.5-1972
- Tested to ANSI N322-1977

These direct-reading dosimeters allow the wearer to read total radiation exposure at any given time, without a separate readout device. The integrated exposure is read on a built-in scale which is illuminated by an external light source with a high illumination factor that provides especially easy readability.

These dosimeters include a built-in string electrometer and ion chamber. Their superior energy response improves exposure accuracy. The housings are hermetically sealed and the strong, alligator-type swivel clip allows attachment in any orientation. To "zero" the dosimeter either the VICTOREEN Model 2000A Charger may be used or similar chargers on the market.

Specifications

MODEL	541L	541R	543	540	544	545	548	546	547	656R
RANGE	200mR	200mR	1R	1.5R	5R	20R	50R	100R	200R	500mR

Radiation Detected: Gamma, X-Ray

Precision: Within 10% of full scale.

Energy Response: 30 keV to 2 MeV with the exception of 541L; 17 keV to 667 keV.

Geotropism: Less than 1 minor scale division in any orientation.

Environmental Effects: Temperature Limits: -10°C to $+50^{\circ}\text{C}$. Humidity Limits: 0-99% Non-Condensing.

Detector: Hermetically sealed ionization chamber.

Leakage: Less than 2% of full scale in 24 hours.

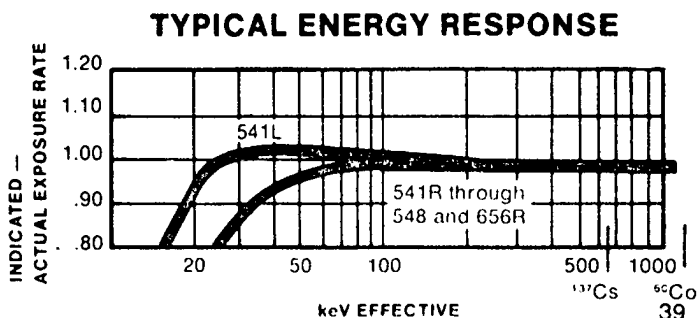
Display: Internal translucent scale.

Construction: Nickel-plated aluminum barrel.

Power Source: Model 2000A Charger.

Dimensions: 10.2 cm long, 1.27 cm dia. (4 in. x 1/2 in.)

Weight: 28g (1.0 oz.)

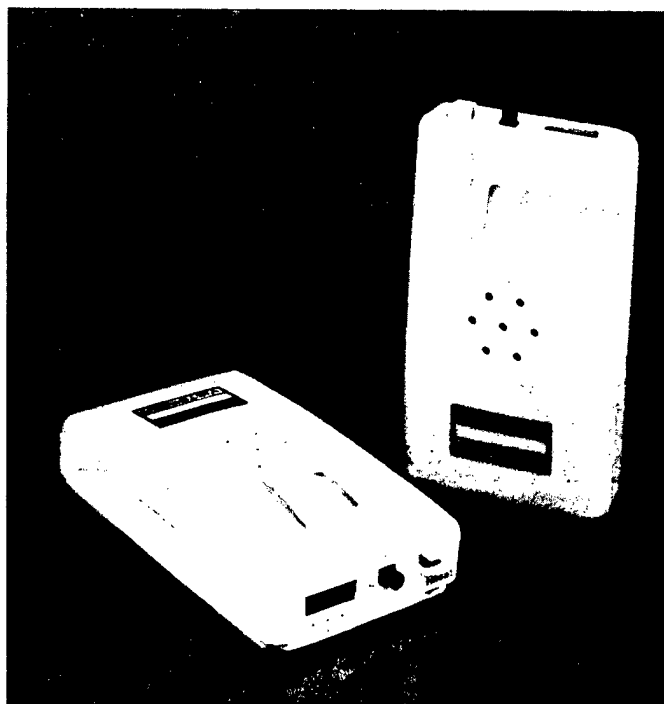




VICTOREEN, INC.
(216) 248-9300
FAX (216) 248-9301

Model 885 Personal Digital Dosimeter

SECTION 3



- LED display range 0 to 999 mR.
- Chirps Provide Immediate Warning of Hazardous Radiation Levels.
- Pocket Size, Lightweight (only 5 oz.)

The low cost, pocket-sized monitor automatically integrates radiation exposure and provides both visual and audible indication. A push-button activates the 3-digit LED display (0-999 mR). Chirps are emitted in direct proportion to the radiation intensity. The accumulated exposure is cleared by using the reset switch.

Battery operated, impact-resistant plastic case has pocket/belt clip. Unit is small enough to fit in a shirt pocket. Weighs only 5 ounces.

Specifications

Radiation Detected: Gamma, X-rays.

Operating Range: 0-999 mR, approx. 1 chirp per 0.025 mR.

Accuracy: Within 15% at ^{137}Cs energy (660 keV) for rates up to 0.1 R/hr. Response drop-off is 5% at 1 R/hr and 10% at 3 R/hr (excludes energy response).

Calibration: ^{137}Cs , 100 mR/hr.

Exposure Rate Limitation: 3 R/hr (typically corresponds to 10% response drop-off).

Audible Output: 2400 Hz, 75 dB at 30 cm.

Energy Dependence: $\pm 5\%$ = 50% from 40 keV to 1.2 MeV. Usable below 30 keV.

Internal Background: GM tube internal background less than 1.5 mR/day.

Environmental Effects: Temp. limits 0 to 40°C. Humidity limits 0-99% non-condensing. Temp. dependence within 0.2% per °C.

Detector: Internal, halogen-quenched, energy-compensated GM tube.

Display: 3-digit LED.

Battery: One 9 V alkaline, Mallory MN 1604 or equal (included). Battery life 30 days (continuous operation) or 120 days at 8 hrs/day in low radiation field (typical).

Low-Battery Indicator: 3 decimal points appear on display when approx. 100 hours of battery life remain.

Controls: Protected reset switch (use pencil tip to actuate). Spring-loaded pushbutton activates display.

Construction: Molded impact-resistant plastic case.

Size: 2½" x 4½" x 1" thick. Weighs 5 oz.

(continued on reverse side)

INF Treaty Inspector Radiation Dosimetry Record

1. (NAME) was an INF Treaty Inspector with the On Site Inspection Agency during calendar year (CY) 1988. During that time, the inspector was provided with a thermoluminescent dosimeter (TLD) to monitor radiation dose. The TLD was capable of detecting x-ray, beta, gamma and neutron radiation. It was processed by the U.S. Army Ionizing Radiation Dosimetry Center in Lexington, KY. The phone number for the dosimetry center is (606) 293-3249.

2. Results of the monitoring program indicate that (NAME) received a cumulative dose of (XXXX) milliRem of radiation during CY-88. This result was in compliance with the Occupational Safety and Health Administration Radiation Standard (OSHA 29 CFR 1910.96), which permits exposure up to 5000 mRem of radiation per year.